**BEFORE THE PUBLIC UTILITIES COMMISSION**
**OF THE STATE OF CALIFORNIA**

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| Order Instituting Rulemaking on the Commission's Own Motion to Conduct a Comprehensive Examination of Investor Owned Electric Utilities' Residential Rate Structures, the Transition to Time Varying and Dynamic Rates, and Other Statutory Obligations. | Rulemaking 12-06-013<br><br>(Filed June 21, 2012) |

# RESPONSE OF THE UTILITY REFORM NETWORK TO THE PETITION FOR MODIFICATION SUBMITTED BY SAN DIEGO GAS & ELECTRIC COMPANY ON NOVEMBER 30, 2018

TURN
THE UTILITY REFORM NETWORK

Lower bills. Livable planet.

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February 1, 2019

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**RESPONSE OF THE UTILITY REFORM NETWORK**
**TO THE PETITION FOR MODIFICATION SUBMITTED**
**BY SAN DIEGO GAS & ELECTRIC COMPANY ON NOVEMBER 30, 2018**

Pursuant to Rule 16.4(f) of the CPUC Rules of Practice and Procedure, and in accordance with the schedule adopted by ALJ Park in her Ruling of December 7, 2018, The Utility Reform Network (TURN) hereby responds to the *Petition For Modification Of D.15-07-001 and D.17-07-006 By San Diego Gas & Electric Company* (PFM or Petition), filed by SDG&E on November 30, 2018.

## I. INTRODUCTION AND SUMMARY OF RECOMMENDATIONS

SDG&E requests permission to eliminate the high user charge (HUC), originally termed the super-user electric surcharge (SUE Surcharge) in D.15-07-001. SDG&E argues that the heat wave of July and August of 2018 caused many more customers to pay the HUC than was ever expected, causing high bills and bill volatilities. SDG&E further argues that rising temperatures due to climate change make recurrence of such summer heat waves likely, thus necessitating a change in rate design.

TURN has long been concerned about the impacts of summer heat on customers' electric bills and health. Indeed, our continued opposition to mandating time-of-use (TOU) rates, even though summer electric use increases the costs of generation capacity and the potential use of peaker plants, is precisely due to our concern that temperatures in parts of California require the use of electricity for air conditioning, and TOU rates (as well as steeply inverted tiers) could cause significant bill volatility and health impacts.

While poorly designed inclining block rates (aka tiered rates) can likewise cause bill volatility, TURN has long championed the benefits of properly designed tiered rates in promoting a baseline amount of affordable electricity and motivating customers to conserve, if those customers are properly educated concerning the impact of tiered rates.[1] Thus, TURN closely examined the data presented by SDG&E to evaluate its claim that the HUC was responsible for high bills, and should be eliminated. TURN did not originally propose the HUC, but we support its goal of providing a price signal to extremely high users.

This close examination of the data revealed that the HUC was not the main culprit of high bills and bill volatilities in the summer of 2018. Rather, SDG&E's use of seasonally differentiated rates was the more important factor driving the disconnect between consumption amounts (kWH) and monthly bills (in dollars or average rates). The data show that:

- Of the $322 (non-CARE) and $191 (CARE) average increase in bills from May to July of 2018, less than 7% (non-CARE) and 4% (CARE) was caused by the HUC rate component, while the rest was due to the increase in consumption and the impact of seasonally differentiated summer rates;
- Eliminating the HUC would have reduced July and August bills by about 4.8% (non-CARE) and 2.1% (CARE), but eliminating seasonal rate differentiation, even while maintaining the HUC, would have reduced July and August bills by 8.7% (both non-CARE and CARE), thus providing twice the amount of average bill relief in the summer!
- The distribution of impacts among users of different amounts of electricity differs when eliminating seasonal differentiation versus the HUC. It is clear that eliminating seasonal differentiation would provide broader benefits, while still providing the largest users with

[1] While many efforts have been funded to educate customers about the timing of electric use, TURN has seen few efforts aimed at explaining how conservation at all times reduces bills under tiered rates.

the greatest bill reductions. Eliminating the HUC would benefit only the 5-8% of the largest electricity users.

Based on these critical facts, TURN suggests that SDG&E's decision to eliminate the HUC is premature and poorly designed to address the key underlying problem – summer bill volatility due to heat waves caused by climate change. SDG&E itself indicated that there are at least three or four other solutions to the summer bill volatility problem. TURN suggests that a combination of 1) eliminating or reducing the seasonal rate differentiation, 2) targeting the climate credit to summer bills, and/or 3) changing the HUC baseline threshold, would more effectively lessen the impacts of rising summer temperatures and heat waves without abandoning the positive elements of the HUC.

## II. THE IMPACT OF THE HUC WAS NOT AS PUNITIVE AS SDG&E CONTENDS, AND THE MORE SIGNIFICANT DRIVER OF HIGH SUMMER BILLS IS SDG&E'S SEASONAL RATE DIFFERENTIATION

### A. Summary of SDG&E's Arguments Concerning the HUC

SDG&E correctly notes that the Commission's stated intent in adopting the HUC in D.15-07-001 was to ensure that high consumption customers were not "inadvertently rewarded" by the move to a two-tiered rate design, and to "send a clear message that the most extreme users are not the intended beneficiaries of this decision, and that overall conservation by these superusers remains an important goal."[2]

The identification of "superusers" who consume "extreme amounts of electricity" is subjective, and the Commission set 400% of baseline use as the threshold with the understanding that it would apply to a "small" number of customers, which was estimated to be include only 2.5% of

[2] PFM, p. 11 (citing to D.15-07-001 at 125-126).

SDG&E's customers.[3] SDG&E contends that in 2017-2018 the HUC impacted both more customers than anticipated, and was also "punitive" because it exacerbated bill volatility during the summer of 2018.[4]

TURN does not disagree that the HUC impacted more customers than previously anticipated due to the heat wave of 2018; however, SDG&E's contentions that the results are so dramatic as to warrant eliminating the HUC are overblown, and ignore the fact that better and more targeted solutions exist to alleviate summer bill volatility.

### B. The Number of Customers Impacted by the HUC

SDG&E provides data showing that:

- 10% of its customers (or 123,400 customers) were billed in the HUC tier for at least one month between November 2017 and October 2018, including 96,932 customers who reached the HUC tier during August of 2018;[5]
- Approximately 9% of those unique customers were CARE/FERA customers;[6]
- Over two-thirds of those customers had HUC usage in only one or two months;[7]
- A small number (about 6,300 customers) had HUC consumption during all twelve months.[8]

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[3] PFM, p. 5, fn. 18. The HUC was estimated to apply to higher percentages of PG&E's (6.2%) and SCE's (9.5%) customers.

[4] PFM, p. 11-12.

[5] PFM, p. 8.

[6] PFM, p. 14.

[7] PFM, p. 14.

[8] PFM, p. 14 and SDG&E Response to TURN DR PFM-001-05.

Critically, the unexpected impact was due to HUC consumption during just the one or two months of July-August, resulting in approximately 45% more unique customers reaching HUC usage than anticipated.[9]

TURN certainly appreciates that those customers who consumed high amounts in July and/or August of 2018 experienced significant and harmful bill volatility. However, as discussed later, the HUC was not the major cause of high summer bills for most of those customers; and there are other mechanisms that are better targeted towards ameliorating summer bill volatility, rather than eliminating the HUC in each and every month of the year.

### C. The HUC Had a Relatively Small Impact on Bill Amounts and Bill Volatility in the Summer of 2018

SDG&E explains that on average non-CARE consumption increased 63% from June to August, while bills increased 77%, and for the average CARE HUC customer, bills increased 110% due to a consumption increase of 83%.[10]

TURN does not disagree that summer bill bills were extremely high and volatile in 2018. Critically, we must remember that the primary culprit of those high bills was the huge increase in consumption. The bill impacts caused by the HUC were actually very small. SDG&E emphasizes that average bills increased $322 between June and August 2018 for non-CARE

[9] PFM, p. 13, fn. 42. SDG&E expected 85,000 customers to reach HUC at least once, compared to the actual of 123,400.

[10] PFM, p. 12. It is important to remember that under a flat rate, bills would increase proportionately to consumption. Thus, it is the relative increase in bills above the increase in consumption that measures the impact of the HUC, or of inclining block rates in general.

customers who had HUC tier usage, and by $191 for CARE HUC customers.[11] However, a closer look at the data shows that without the HUC, the increases would have been $300 (non-CARE) and $183 (CARE), simply due to the higher consumption and the use of two-tiered seasonally differentiated summer rates.[12] In other words, the HUC caused only $22 of the $322 increase for non-CARE customers (about 7% of the increase) and only $8 of the $191 increase for CARE customers (about 4%). TURN suggests that such portions of the bill increase cannot be characterized as punitive, and eliminating the HUC would have done little to ameliorate the huge summer bill increases. The HUC was simply not the main driver of high summer 2018 bills for most customers!

On an aggregate basis HUC revenues comprised less than 6% of the total residential class revenues billed in 2018.[13]

TURN appreciates that bill averages mask distributional differences. Undoubtedly, some customers got higher bill increases, and higher increases due to the HUC. However, SDG&E's own data illustrate that only a relatively small number of customers saw significant bill increases due to the HUC, consistent with the Commission's expectation that the HUC would provide a price signal only to those who use extreme amounts of electricity.

Thus, on an annual basis, non-CARE customers would have on average saved $1.10 per month without the HUC; but the savings flow entirely to the less than 6% of customers who use more

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[11] PFM, p. 12 and Appendix C, pp. 13-14.

[12] PFM, Appendix C, Table 10 and 11, pp. 13-14.

[13] SDG&E Response to TURN DR PFM-01-02.

than 900 kWh in each month, while the remaining 94% of customers would pay slightly more each month.[14] The distributional impact is even worse for CARE customers, as more than 99% of coastal CARE customers would pay more on an annual basis without the HUC.[15]

Even during just the summer period, less than 10% of the non-CARE coastal customers would have benefitted from an elimination of the HUC, and only less than 5% would benefit by more than $10 per month.[16] In other words, while about 10% of coastal summer non-CARE customers saw bill increases due to the HUC, only 5% saw significant bill increases.

## III. SDG&E SHOULD ELIMINATE SEASONALLY DIFFERENTIATED RATES IN ORDER TO PROVIDE GREATER SUMMER BILL RELIEF AND BROADER PROTECTION AGAINST BILL VOLATILITY

### A. The Key Problem Due to Climate Change and Heat Waves is Summer Bill Volatility

SDG&E explains that the impacts during the summer of 2018 resulted from an "unprecedented heatwave," with unusually hot July and August temperatures.[17] SDG&E notes that average July-August temperatures in its service territory have been increasing since 1985.[18]

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[14] PFM, Appendix C, Attachment A, p. A-50. Summing "% of customers" for all lines where the change in monthly energy charges is positive (lines 1-19).

[15] PFM, Appendix C, Attachment A, p. A-5.

[16] PFM, Appendix C, Attachment A, p. A-7. Since the consumption bins provide average bill changes, TURN selected the middle of the 1000-1500 kWh bin to approximate the 5% figure.

[17] PFM, Appendix B, p. 2.

[18] PFM, Appendix B, p. 3.

TURN does not disagree at all that climate change is causing a warming in California, and will likely exacerbate extreme temperature events, though regrettably SDG&E did not provide any statistical analysis of the recurrence interval of the temperatures observed in summer of 2018.

Nevertheless, if one assumes that the heatwave of 2018 is not a statistical outlier, the fact is that SDG&E should first implement other alternatives that can moderate summer bill increases without eliminating the HUC, which the Commission authorized in order to provide very large electricity users with an economic incentive to reduce consumption. SDG&E itself identified at least three other alternatives in an October 18, 2018 presentation.[19] Regrettably, while SDG&E apparently discussed these options during an *ex parte* meeting, it did not discuss these alternatives at all in its PFM.

The first and most efficacious alternative to reduce bill volatility would be to eliminate "seasonal rate differentiation," which results in higher summer rates and lower winter rates. Indeed, it is the significant increase in the 2018 seasonal rate differential that may have had the most to do with the large bill increases during that summer.

[19] SDG&E *Ex Parte* Filing in R.12-06-013, October 23, 2018, Exhibit A (included as Attachment A).

### B. SDG&E's Seasonal Differentiation Increased Dramatically in 2018 and Appears Exceptionally High

SDG&E is the only utility in California that employs "seasonal differentiation" between its summer and winter rates. Summer monthly rates are set at a higher price than winter rates. SDG&E explained that due to seasonal rates, a two-fold increase in consumption would cause an almost three-fold increase in bills, and that eliminating the seasonal pricing could reduce bill volatility by 20%.[20]

The impacts of seasonal differentiation were exacerbated in 2018 by the reduction in the summer period from six to five months, apparently with no reduction in the revenues allocated to the summer period.[21] According to the ORA, this change increased the summer to winter differential from 6.7 cents to 10.2 cents, and was forecast to dramatically increase summer bill in 2018.[22] Despite the negative impact on summer rates, SDG&E resisted suggestions to lower the seasonal differential in testimony submitted just prior to the July-August heat waves, arguing that such a change would "provide customers with inaccurate price signals."[23] The Commission agreed with the ORA that the seasonal differential for the "default TOU" rate to be implemented in 2019 should be kept at 6.7 cents in order to prevent customer rejection of the TOU rate, and the

[20] SDG&E Rate Proposals, October 18, 2018, p. 6.

[21] See, D.17-08-030, p. 17.

[22] A.17-12-013, ORA Amended Phase 2A Testimony, May 15, 2018, p. 1-8 (included as Attachment B). TURN has not researched the differential in actual summer 2018 rates. Moreover, it is TURN's understanding that the differential varies by tier, and was highest for the HUC tier.

[23] A.17-12-013, Rebuttal Testimony of Cynthia Fang, June 7, 2018, p. CF-5.

Commission ordered that the seasonal differential for the non-TOU tiered rate "should also be reduced to 2017 levels."[24] The results of 2018 confirm the soundness of that decision.

While TURN has not analyzed the underlying marginal cost basis for the differential, we note that SCE, which proposes to differentiate its tiered and TOU rates after the start of default TOU in October 2020, proposed a summer to winter differential of 2 cents. SCE subsequently filed a settlement agreement with several parties that reduces this differential to just one cent.[25] Thus, even SDG&E's 2017 differential of 6.7 cents is significantly higher than the differential proposed by SCE.

### C. Eliminating Seasonal Pricing of Tiered Rates Provides Much Greater Bill Volatility Benefits and Is More Equitable to All Customers, Rather than Favoring Only the Top 5-10% of High Users

Seasonal rate differentiation increases summer bills twice as much as the HUC for those customers who have HUC tier consumption ("HUC customers"). SDG&E data responses show that eliminating seasonal differentiation would have reduced July and August bills by 8.6% for non-CARE HUC customers and 8.7% for CARE HUC customers, while eliminating the HUC would have reduced bills by only 4.8% for non-CARE customers and 2.1% for CARE customers, as detailed in Tables 1 and 2.[26] Eliminating the HUC lowers bills for HUC customers in all months, while eliminating seasonal differentiation reduces summer bills by twice as much,

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[24] D.18-12-004, p. 29.

[25] A.17-12-011 et al., Joint Motion for Settlement Agreement, December 6, 2018, p. 11.

[26] Tables based on SDG&E responses to TURN DR 001-10, 001-11, and 03-01, included in Attachment C. The tables illustrate the percentage change in "average rates" for each month, which allows an apples-to-apples comparison. The bill impact for each month will be directly proportional to the rate change in that month. Of course, bill in different months will vary due to changes in consumption. These tables reflect the impacts only on those customers who reached the HUC in each month.

but raises bills during the seven winter months of November-May, thus significantly reducing bill volatility during the high consumption summer months. The impacts of eliminating both rate design elements are additive.

**Table 1: Impact of HUC and Seasonal Differentiation on Non-CARE HUC Customers (all numbers are %)**

| | Sep-17 | Oct-17 | Nov-17 | Dec-17 | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 | Jun-18 | Jul-18 | Aug-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W/o HUC | -3.9 | -3.6 | -3.1 | -3.1 | -3.1 | -3.1 | -3.0 | -3.0 | -3.0 | -3.3 | -4.7 | -4.8 |
| W/o Seasonal | -8.6 | -8.6 | 7.7 | 7.7 | 7.7 | 7.7 | 7.7 | 7.7 | 7.7 | -8.6 | -8.6 | -8.6 |
| W/o HUC and w/o Seasonal | -12.1 | -11.9 | 4.2 | 4.2 | 4.2 | 4.2 | 4.3 | 4.2 | 4.2 | -11.7 | -12.9 | -13.0 |

**Table 2: Impact of HUC and Seasonal Differentiation on CARE HUC Customers (all numbers are %)**

| | Sep-17 | Oct-17 | Nov-17 | Dec-17 | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 | Jun-18 | Jul-18 | Aug-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W/o HUC | -0.61 | -0.15 | 0.41 | 0.16 | 0.33 | 0.30 | 0.38 | 0.52 | 0.52 | 0.15 | -1.71 | -2.14 |
| W/o Seasonal | -8.71 | -8.71 | 7.76 | 7.75 | 7.75 | 7.75 | 7.76 | 7.75 | 7.74 | -8.70 | -8.69 | -8.69 |
| W/o HUC and w/o Seasonal | -8.95 | -8.62 | 8.25 | 8.04 | 8.18 | 8.19 | 8.26 | 8.31 | 8.34 | -8.46 | -10.27 | -10.55 |

The above tables reflect the impacts only on those 10% of customers who reached the HUC in 2017-2018. But eliminating seasonally tiered rates further improves equity, because unlike elimination of the HUC, it benefits all customers. On an annual basis, fully 100% of customers in SDG&E's service territory benefit from the elimination of seasonal rates, including CARE and non-CARE customers in all consumption ranges.[27] In contrast, on an annual basis 99% of CARE

[27] SDG&E Response to TURN DR PFM-003-01. Included in Attachment D.

customers and 93% of non-CARE customers pay more (i.e. lose) when the HUC is eliminated![28] The one to seven percent of customers who are "winners" are concentrated in the highest consumption ranges, with average monthly loads in excess of 900 kWh.[29] The amount of load shifting is illustrated by the fact that even though 93% of non-CARE customers are losers, the "average" bill impact of eliminating the HUC is negative, due to the very large gains for the top 7% of consumption customers.

Eliminating seasonal differentiation thus offers greater summer bill reductions to those customers presently impacted by the HUC, but also offers bill reduction benefits to all other customers, and is thus a more equitable and more effective policy to combat summer bill volatility.

## IV. SDG&E SHOULD EXPLORE OTHER ALTERNATIVES TO ALLEVIATING HIGH SUMMER BILLS DURING EXTREME WEATHER

### A. Changing the Timing of the Climate Credit Would Reduce HUC Bill Impacts During the Key Summer Month

The Climate Credit is applied to customer bills in April and October, reducing bills in those two months by over $30 each.[30] As explained above, the maximum average impact of the HUC was a $22 increase on the August bill (generally due in September). Approximately 5% of all non-

[28] PFM, Appendix C, Attachment A, pp. A-49 and A-50 (summing % of all customers in rows where the % change is positive due to HUC elimination).

[29] *Id.* See rows 21-24 on p. A-49 (CARE) and rows 20-24 on p. A-50 (non-CARE).

[30] See, for example: http://www.cpuc.ca.gov/climatecredit/. The SDG&E bill credit in 2018 was $33.50 each time.

CARE customers experienced an average annual monthly bill increase of over $6, with much of that increase likely concentrated in the July and August periods.

Applying the Climate Credit entirely to August bills (for consumption in August), would thus reduce the impacts of the HUC by about $60. While the bill is reduced, it does not eliminate the price signal shown to the customer due to consumption in the HUC tier.

### B. Modifying the Consumption Trigger for the High User Charge to 500% or 600% Would Reduce the Summer Bill Impacts

The current trigger of the HUC is 400% of baseline consumption. The Commission found that such an amount represents "truly high usage," and explained that this finding was consistent with prior decisions concerning CARE customer consumption.[31]

As explained by SDG&E, current baseline allowances were "filed in 2014" and implemented in 2016, thus presumably using data prior to 2015. The huge growth in rooftop solar in the SDG&E service territory just started in 2014, with cumulative installed residential solar capacity more than tripling from 212 MW by end of 2014 to over 755 MW by 2018.[32]

What this means in practice is that summer season residential net load consumption has decreased since 2014 due to the impact of self-generation. Any future updated baseline calculation would result in a lower baseline, and a resulting lower HUC trigger. This means that more non-solar customers would be impacted by the HUC, simply due to the artificial "reduction" in electric consumption measured and billed by the utility.

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[31] D.15-07-001, pp. 121-125 (citing to D.12-08-044 and D.14-08-030).

[32] See, https://www.californiadgstats.ca.gov/charts/ (filtered for SDG&E-residential).

One alternative to ameliorate this impact would be to increase the HUC trigger, to either 500% of 600% of baseline consumption.[33] Regrettably, TURN could not obtain comparative data from SDG&E to evaluate the impact of changing the HUC threshold due to the fact that all of SDG&E's analyses in the Petition were based on a non-static database that cannot be replicated.[34]

## V. CONCLUSION

TURN greatly appreciates that summer heat waves can exacerbate bill volatility and cause significant problems for customers. Nevertheless, eliminating the HUC is a response that would ameliorate such increases by an average of only about 4%, and would benefit very few of the largest users. Instead, eliminating high summer rates created by seasonal rate differentiation provides greater bill reductions and significantly reduces summer bill volatility, and more equitably benefits all electric users, rather than just the largest consumers. The Commission should order SDG&E to eliminate or reduce its summer seasonal rate differentiation immediately, or else to provide additional testimony, analyses and recommendations in its next rate design portion of its rate case.

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[33] The Commission determined that customers who used more than 600% of baseline would face de-enrollment from the CARE program. D.12-08-044, pp. 219-220.

[34] SDG&E used the "active" customers in its database to create all the charts and tables in its PFM. Apparently, that database was not "frozen," so that other analyses cannot be performed on the same database. SDG&E provided TURN with data responses that used a different data set and are thus not comparable to the data in the PFM. TURN did not appreciate this fact until it was too late to request that both the original and new calculations be performed using a different and consistent data set.

February 1, 2019

Respectfully submitted,
_____/S/_____

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## ATTACHMENTS

Attachment A: SDG&E *Ex Parte* Filing in R.12-06-013, October 23, 2018, Exhibit A.

Attachment B: A.17-12-013, ORA Amended Phase 2A Testimony, May 15, 2018, p. 1-8.

Attachment C: SDG&E responses to TURN DR 001-10, 001-11 and 02-03 (misidentified as DR 03-01 in file).

Attachment D: SDG&E Response to TURN DR PFM-003-01.

**Attachment A:**

SDG&E *Ex Parte* Filing in R.12-06-013, October 23, 2018, Exhibit A.

# Exhibit A
# SDG&E Presentation

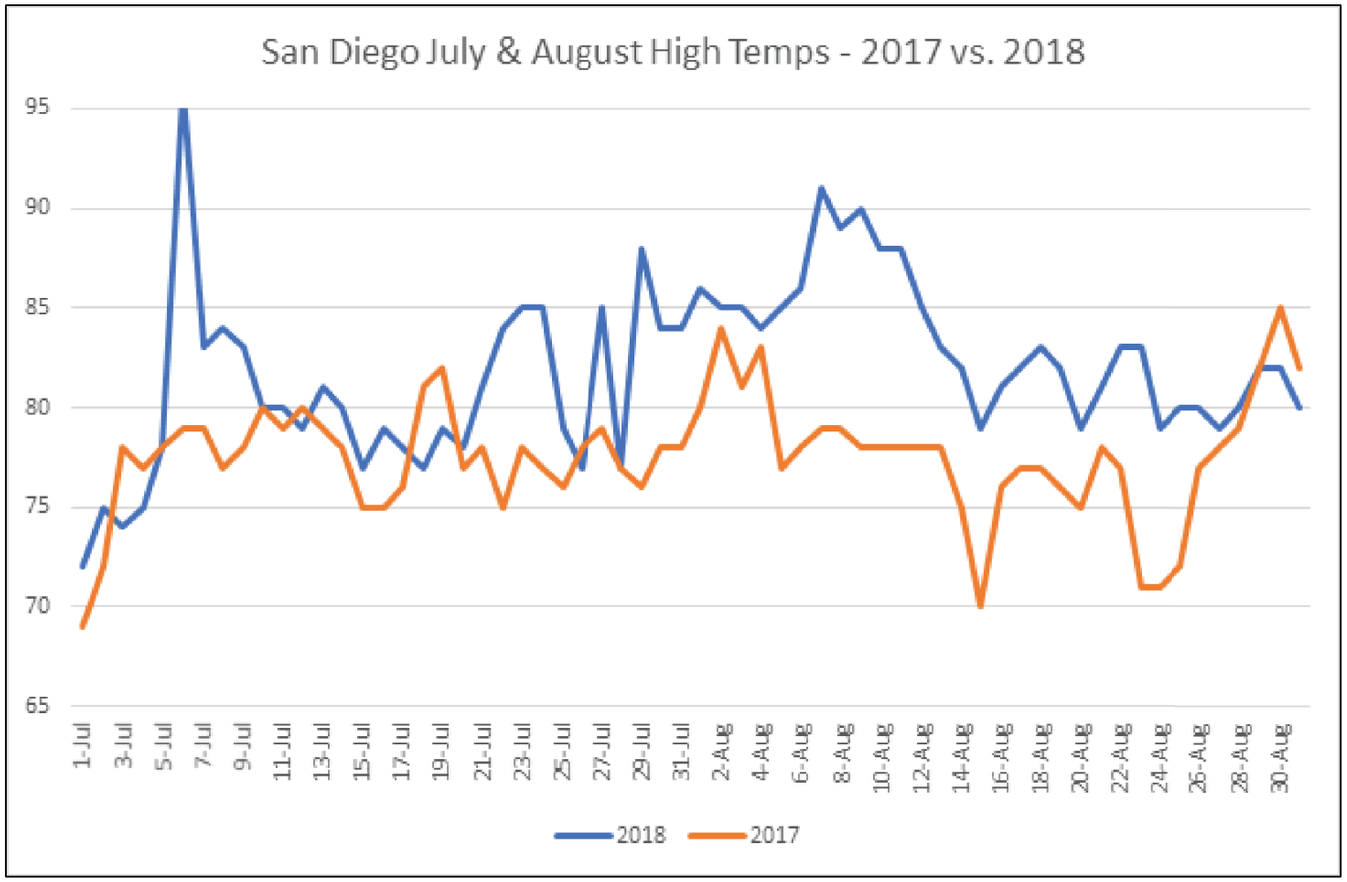
**OCTOBER 2018**

# SDG&E Rate Proposals

October 18, 2018

# Weather Driving Higher Demand

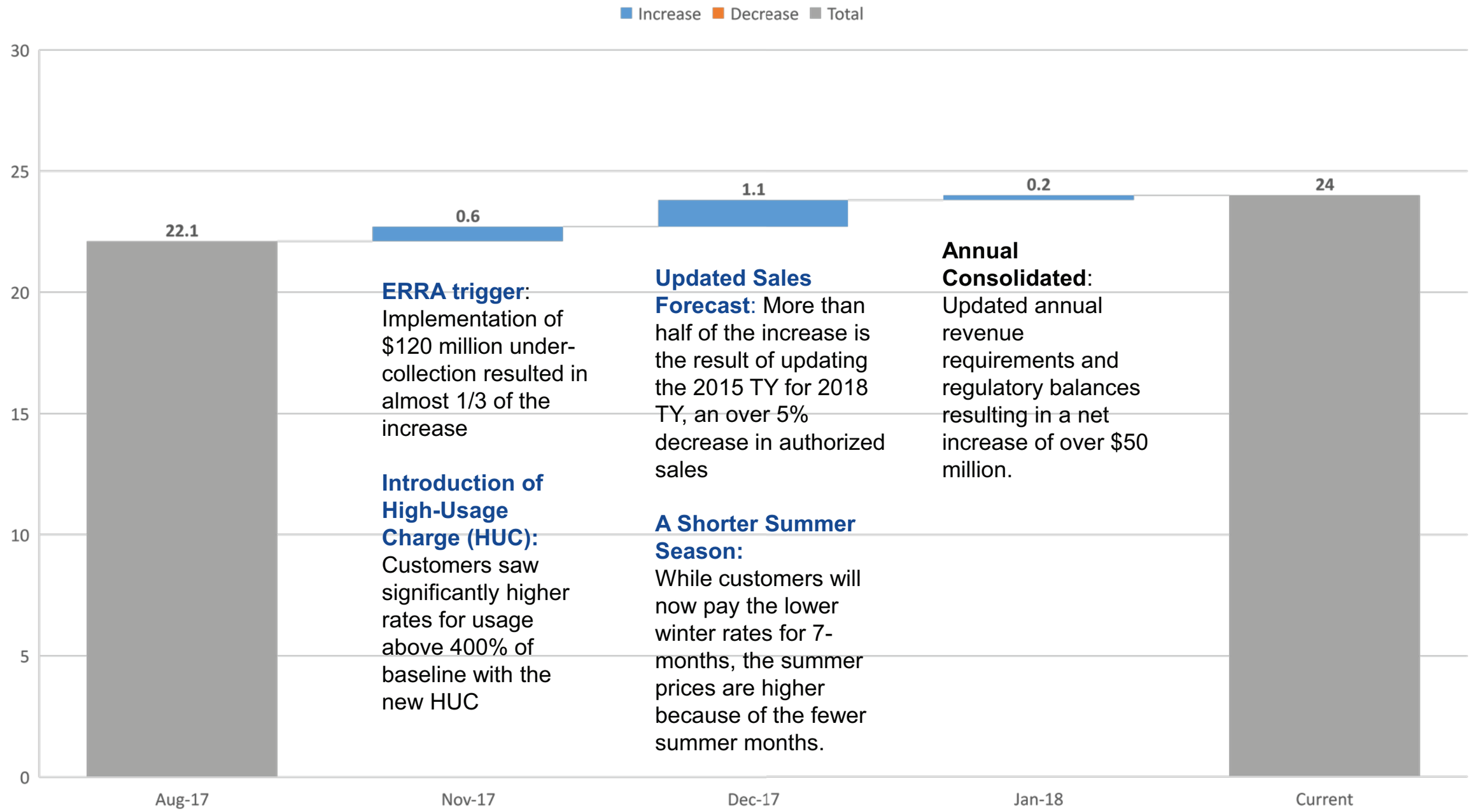
*Unprecedented heat is changing electricity usage patterns and leading to higher bills*




- July 1 to mid-August was the hottest period ever recorded in San Diego
- August was hottest month on record
- During several days in August, the low temperature exceeded the normal high temperature
- Ocean temperatures in San Diego reached 80 degrees
- Non-desert communities reached 117 degrees in July

# Rates Changes

*An 8% increase of the system average rate since summer 2017 and introduction of the High Usage Charge and shorter summer season contributing to higher bills*




**ERRA trigger**: Implementation of $120 million under-collection resulted in almost 1/3 of the increase

**Introduction of High-Usage Charge (HUC):** Customers saw significantly higher rates for usage above 400% of baseline with the new HUC

**Updated Sales Forecast**: More than half of the increase is the result of updating the 2015 TY for 2018 TY, an over 5% decrease in authorized sales

**A Shorter Summer Season:** While customers will now pay the lower winter rates for 7-months, the summer prices are higher because of the fewer summer months.

**Annual Consolidated**: Updated annual revenue requirements and regulatory balances resulting in a net increase of over $50 million.

# Rate Proposals

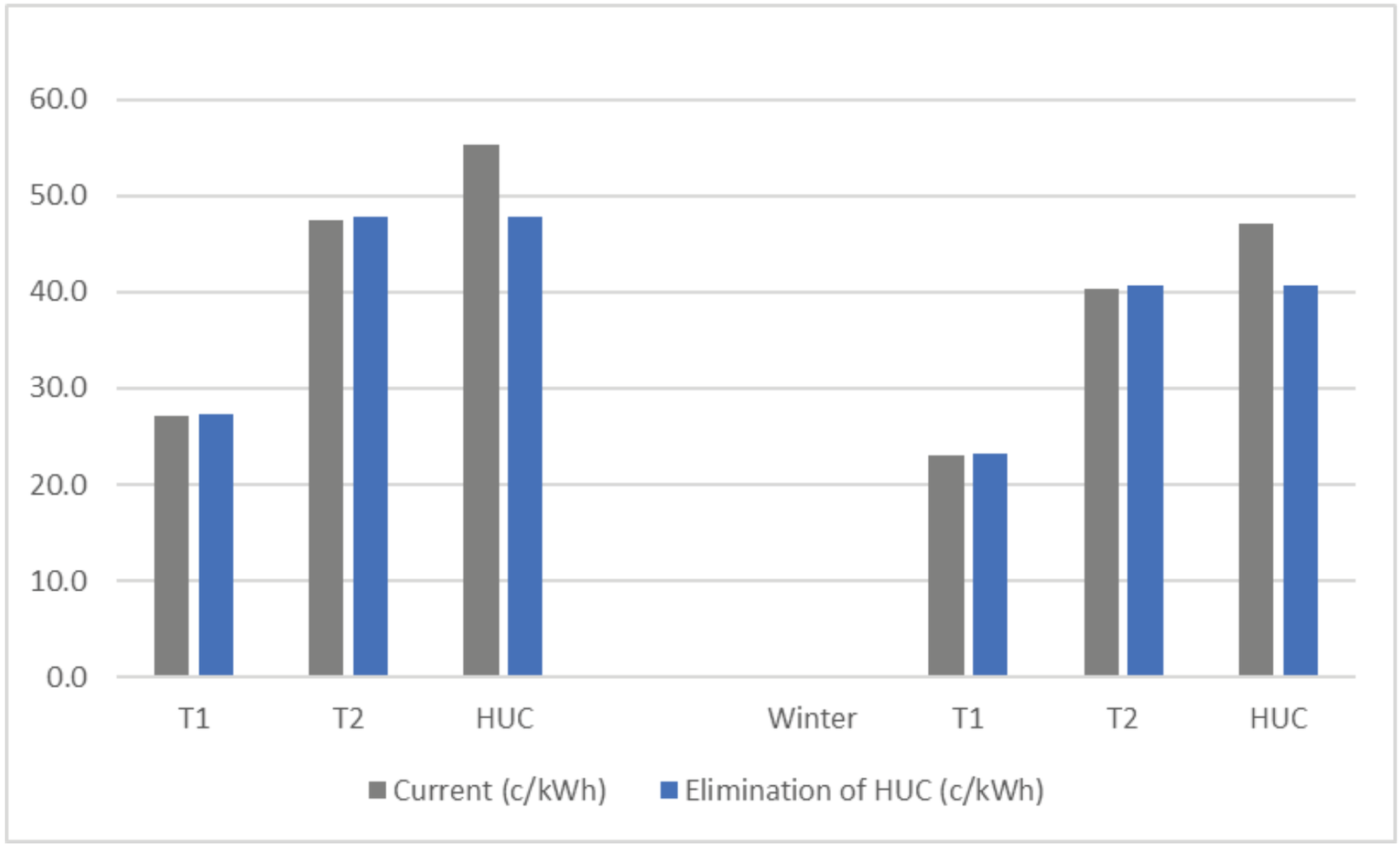
*SDG&E plans to announce and seek approval of several rate proposals designed to deliver rate relief to many customers and reduce bill volatility*

| Proposal | Customer Benefits |
|---|---|
| **Accelerate SONGS rate reduction and refund to October (complete)** | Delivers bill relief during summer months when its needed most |
| **Remove the High Usage Charge from tiered rates** | Reduces bill volatility for customers and allows them to better budget utility expenses |
| **Eliminate seasonal pricing** | Expands rate options and choice for customers to better manage their bills |
| **Change timing of climate credit to provide relief when its needed most** | Responds to changing weather patterns in San Diego where hot and more intense summers are becoming common |
| **Complete study to reexamine baseline allowances and new issues that may impact baseline like NEM** | |

# Proposal: Eliminate High Usage Charge

*High Usage Charge exacerbating bill impacts and creating highly negative reaction among customers and local media*

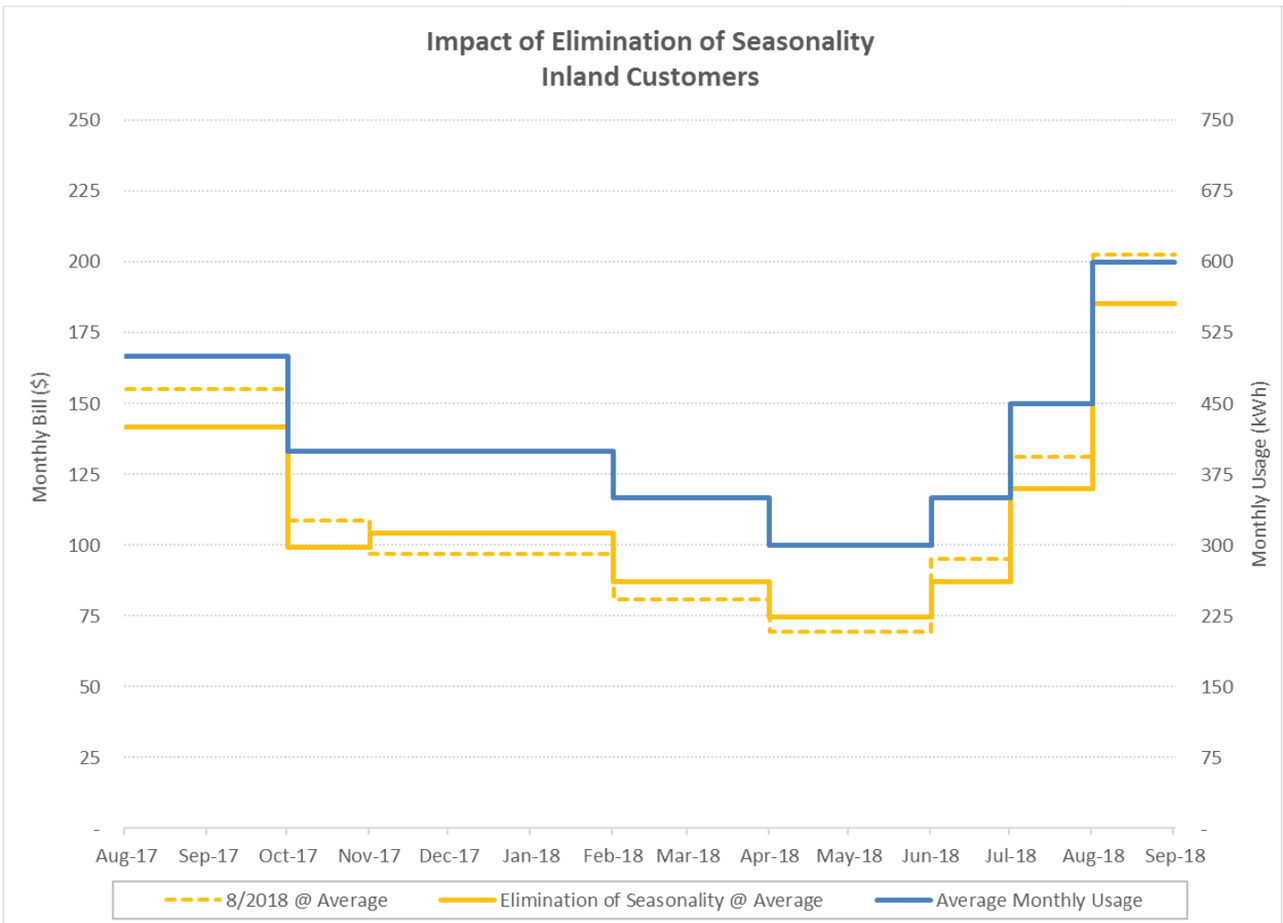
- Approximately 110,000 customers hit HUC in 2018
- Eliminating HUC has minimal impact on Tier 1 and Tier 2 rates, while still sending a conservation price signal, but removes controversial rate element that is viewed as price gouging by many customers

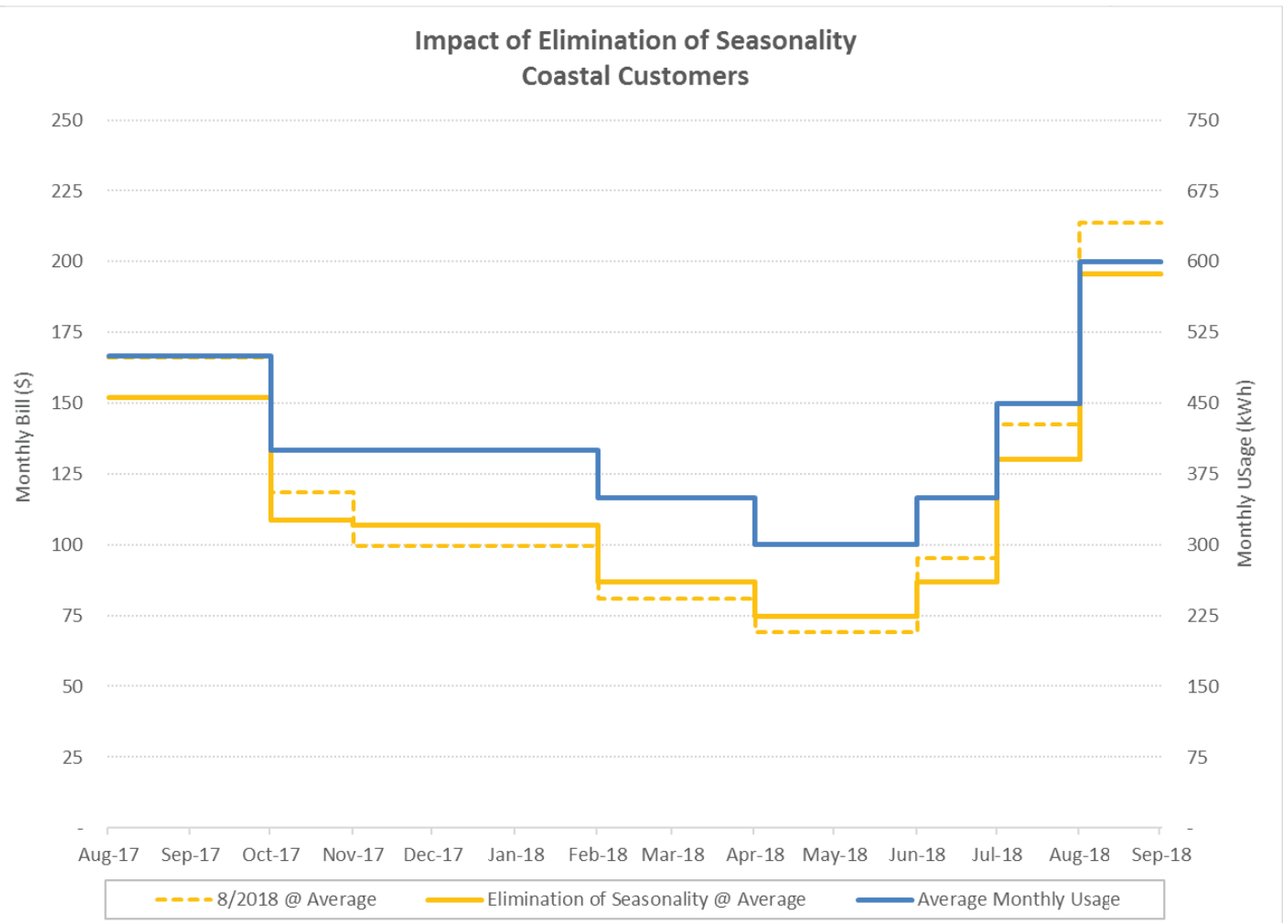


# Proposal: Eliminate Seasonal Pricing

*Higher seasonal differences from a shorter summer period combined with hotter weather exacerbate seasonal bill volatility*

- With current seasonal rates, a 2x increase in usage can result in an almost 3x increase in customer bills
- Elimination of seasonal pricing could reduce bill volatility by ~ 20% to a ~2.5x increase and provide customers needed relief as demand climbs in response to more intense summers



# Proposal: Change Timing of Climate Credit

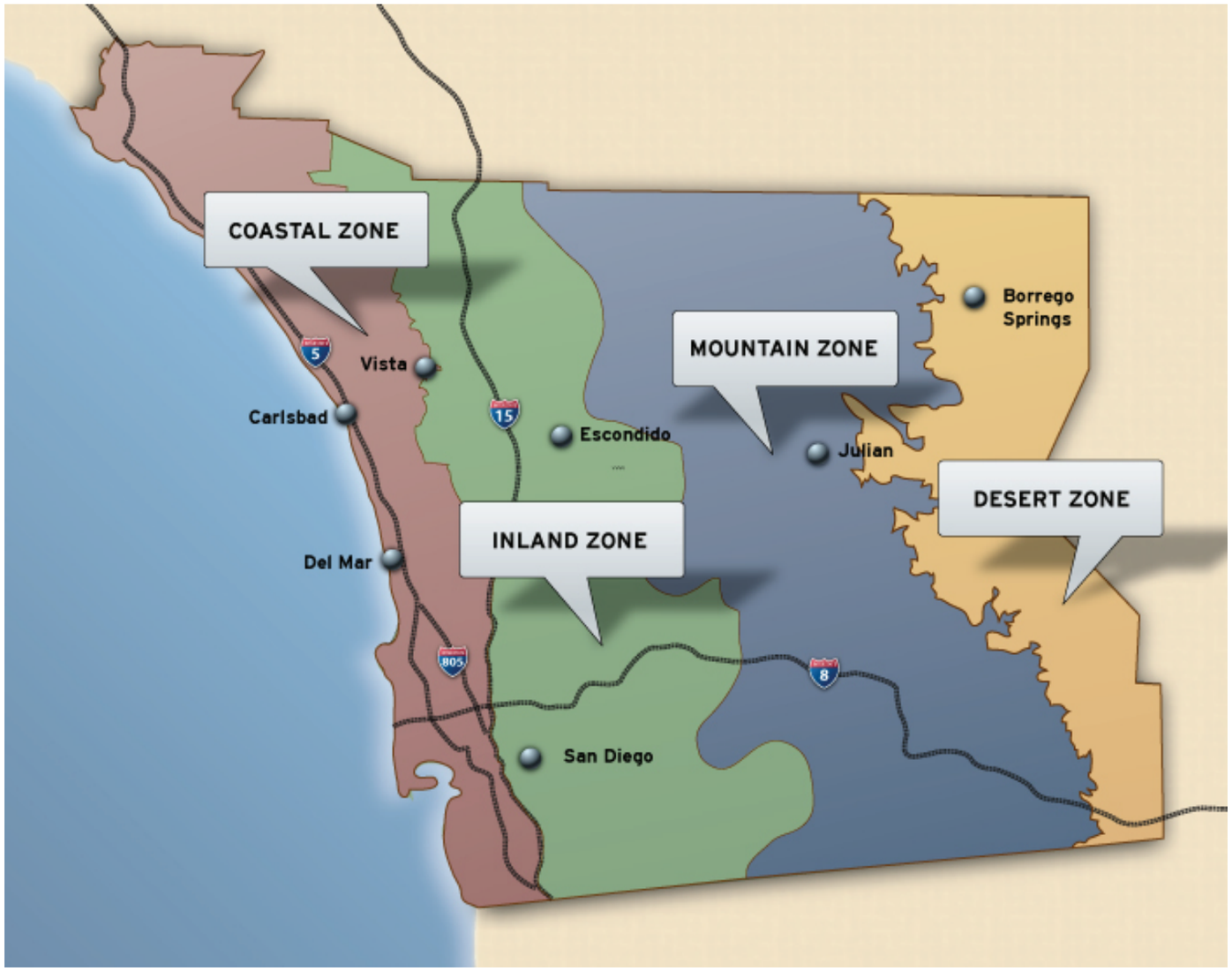
*Changing the timing of the residential climate credit would provide relief from high summer bills when its needed most, especially for our most vulnerable customers*

| Today | Future |
| --- | --- |
| April & October | Single Credit in September |

CPUC Decision D.13-12-003 determined the timing of the residential Climate Credit be returned in April and October of each year (OP 1.d.).

# Proposal: Complete New Baseline Study

*An updated baseline study ensures most current information is used to determine baseline allowances*




- Current climate zone definition have been in effect since 2002
- Current baseline allowances were filed in 2014 and first implemented in 2016
- Current baseline allowances fail to consider recent changes in customer usage such as adoption of solar

**Attachment B:**

A.17-12-013, ORA Amended Phase 2A Testimony, May 15, 2018, p. 1-8.

| | | |
|---|---|---|
| Docket: | : | A.17-12-011 |
| Exhibit Number | : | |
| Commissioner | : | Michael Picker |
| Admin. Law Judge | : | Sophia Park |
| | : | Pat Tsen |
| ORA Project Mgr. | : | Matthew Karle |
| | : | Eric Duran |
| | : | Dexter Khoury |

**OFFICE OF RATEPAYER ADVOCATES**
**CALIFORNIA PUBLIC UTILITIES COMMISSION**

# AMENDED

# TESTIMONY ON 2018 RESIDENTIAL RATE DESIGN WINDOW PHASE 2A

San Francisco, California
May 15, 2018

214471969

### B. The Seasonal Differential Should be Moderated in TOU and Tiered Rates

Due to recent changes in SDG&E's seasonal differential, customers will face a marked increase in bills this summer. This is mainly driven by SDG&E's increase in the commodity seasonal differential from 6.715 cents in 2017[29] to 10.169 cents in 2018.[30] In 2017, customers' summer bills were 10% higher than winter bills.[31] This summer, assuming no change in usage, average monthly summer bills will be 19% higher than their winter bills.[32] This large difference is unacceptable. SDG&E should monitor this situation by keeping track of customer disconnections and complaints due to high summer bills. In addition, ORA is concerned that large seasonal volatility, if left unchecked, could lead to extremely high bills, an increase in arrearages, and ultimately, an increase in disconnection rates.

To mitigate seasonal bill volatility, the Commission should set the commodity seasonal differential at the 2017 rate, 6.715 cents. The following table compares ORA's illustrative rates with SDG&E's proposed TOU rate designs. ORA's proposal adjusts the commodity rate to be set at a differential of 6.715 cents between summer and winter energy rates. Reducing the seasonal commodity rate differential has the effect of moderating both TOU and tiered rates, which is the case in ORA's proposals.

[29] As of January 1, 2017, per AL 3028-E, Schedule EECC.

[30] As of January 1, 2018, per AL 3167-E, Schedule EECC.

[31] Calculated using 2017 rates and usage data provided by SDG&E in this application.

[32] *Ibid.*

**Table 1-1: SDG&E and ORA TOU Rate Comparison**

| SDG&E Proposal | | ORA Proposal | |
|---|---|---|---|
| **3-Period Default TOU** | **2-Period Opt-Out TOU** | **3-Period Opt-Out TOU** | **2-Period Default TOU** |
| **Minimum Bill** | **Minimum Bill** | **Minimum Bill** | **Minimum Bill** |
| $0.329/day | $0.329/day | $0.329/day | $0.329/day |
| **Summer Energy Rates (cents/kWh)** | **Summer Energy Rates (cents/kWh)** | **Summer Energy Rates (cents/kWh)** | **Summer Energy Rates (cents/kWh)** |
| On-Peak: 47.5 | On-Peak: 43.8 | On-Peak: 44.244 | On-Peak: 41.077 |
| Off-Peak: 21.2 | Off-Peak: 20.2 | Off-Peak: 21.153 | Off-Peak: 20.343 |
| Super Off-Peak: 15.1 | | Super Off-Peak: 15.816 | |
| **Tier 2 Adjustment: 20.2**[33] | **Tier 2 Adjustment: 20.2** | **Tier 2 Adjustment: 19.641** | **Tier 2 Adjustment: 19.641** |
| **Winter Energy Rates (cents/kWh)** | **Winter Energy Rates (cents/kWh)** | **Winter Energy Rates (cents/kWh)** | **Winter Energy Rates (cents/kWh)** |
| On-Peak: 23.7 | Off-Peak: 23.7 | On-Peak: 24.471 | On-Peak: 24.470 |
| Off-Peak: 22.8 | On-Peak: 22.3 | Off-Peak: 23.304 | Off-Peak: 22.733 |
| Super Off-Peak: 21.7 | | Super Off-Peak: 22.009 | |
| **Tier 2 Adjustment: 17.1** | **Tier 2 Adjustment: 17.1** | **Tier 2 Adjustment: 17.477** | **Tier 2 Adjustment: 17.477** |

Table 1-2 compares SDG&E's and ORA's proposed tiered opt-out rates. ORA's proposed rates reflect a moderated seasonal commodity rate. This results in a more moderate summer to winter differential in tiered rates.

[33] SDG&E has renamed "baseline credit" as "Tier 2 adjustment." In D. 15-07-001, Conclusion of Law 45 states, "We should adopt a baseline credit on any default TOU rate and on at least one available TOU optional rate, as well as any TOU pilot rates."

**Table 1-2: SDG&E and ORA Tiered Opt-Out Rate Comparison[34]**

| SDG&E | ORA |
|---|---|
| **Tiered Opt-Out Rate** | **Tiered Opt-Out Rate** |
| **Minimum Bill**<br>$0.329/day | **Minimum Bill**<br>$0.329/day |
| **Summer Energy Rates (cents/kWh)**<br>Tier 1: 26.8<br>Tier 2: 46.9<br>HUC: 54.7 | **Summer Energy Rates (cents/kWh)**<br>Tier 1: 26.081<br>Tier 2: 45.722<br>HUC: 53.272 |
| **Winter Energy Rates (cents/kWh)**<br>Tier 1 22.7<br>Tier 2: 39.8<br>HUC: 46.4 | **Winter Energy Rates (cents/kWh)**<br>Tier 1 23.209<br>Tier 2: 40.686<br>HUC: 47.404 |

### C. Opening a Non-Tiered TOU Rate to All Residential Customers Will Create Revenue Shortfalls.

SDG&E proposes to consolidate schedules DR-SES and EV-TOU-2 in to a single un-tiered TOU rate schedule, as there are no longer any differences between these two schedules.[35] At present, the DR-SES is available to households with a solar energy system, and EV-TOU-2 is provided to customers with an electric car. SDG&E proposes to close EV-TOU-2 and expand the eligibility of DR-SES to include *any* residential customer and renamed as Schedule "TOU-D."[36]

On March 30 2018, the Commission issued a Proposed Decision (PD) on the IOUs transportation electrification (TE) applications[37] rejecting SDG&E's proposed grid integration rate (GIR),[38] which SDG&E designed to facilitate EV charging behaviors.[39]

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[34] The commodity differential of 10.169 cents for SDG&E comes from AL 3167-E. ORA's commodity differential of 6.715 cents is inputted into SDG&E rate model which includes a 25% downward adjustment when setting the tiered rates. Therefore, the differential becomes 5.036 cents, which is 75% of 6.715 cents. For TOU rates, SDG&E applies the full seasonal commodity differential (i.e. they do not adjust this by 25%).

[35] After implementing D.17-08-030, these schedules have the same TOU periods and same charges associated with each period.

[36] SDG&E Direct Testimony Chapter 1 at CF-18.

[37] A.17-01-020 et al.

[38] *Proposed Decision on the Transportation Electrification Standard Review Projects*, OP 17, in A.17-01-020.

[39] A.17-01-020 et al. Exhibit SDGE-05, page CF-1. SDG&E proposed new rates to support the

**Attachment C:**

SDG&E responses to TURN DR 001-10, 001-11 and DR 02-03 (misidentified as DR 03-01 in file). Last page represents working spreadsheet reproducing sections of prior responses.

**Table 10: Average Monthly Usage and Bills of Non-CARE HUC Customers**

| | Sep-17 | Oct-17 | Nov-17 | Dec-17 | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 | Jun-18 | Jul-18 | Aug-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Average kWh** | 1,259 | 1,141 | 941 | 1,045 | 978 | 875 | 936 | 888 | 926 | 1,012 | 1,611 | 1,652 |
| **Average Bill with HUC** | $ 544.92 | $ 482.68 | $ 325.57 | $ 366.56 | $ 338.35 | $ 302.15 | $ 321.12 | $ 303.48 | $ 316.79 | $ 420.69 | $ 721.53 | $ 743.36 |
| **Average Bill without HUC** | $ 523.94 | $ 465.39 | $ 315.42 | $ 355.14 | $ 328.00 | $ 292.88 | $ 311.42 | $ 294.23 | $ 307.17 | $ 406.65 | $ 687.84 | $ 707.42 |
| **Average Effective Rate with HUC** | $ 0.433 | $ 0.423 | $ 0.346 | $ 0.351 | $ 0.346 | $ 0.345 | $ 0.343 | $ 0.342 | $ 0.342 | $ 0.416 | $ 0.448 | $ 0.450 |
| **Average Effective Rate without HUC** | $ 0.416 | $ 0.408 | $ 0.335 | $ 0.340 | $ 0.335 | $ 0.335 | $ 0.333 | $ 0.331 | $ 0.332 | $ 0.402 | $ 0.427 | $ 0.428 |
| **Change in Effective Rate** | -3.9% | -3.6% | -3.1% | -3.1% | -3.1% | -3.1% | -3.0% | -3.0% | -3.0% | -3.3% | -4.7% | -4.8% |

**Table 11: Average Monthly Usage and Bills of CARE HUC Customers**

| | Sep-17 | Oct-17 | Nov-17 | Dec-17 | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 | Jun-18 | Jul-18 | Aug-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Average kWh** | 906 | 797 | 637 | 727 | 673 | 607 | 648 | 615 | 644 | 736 | 1,258 | 1,349 |
| **Average Bill with HUC** | $ 227.65 | $ 191.77 | $ 120.44 | $ 142.22 | $ 128.38 | $ 115.88 | $ 122.14 | $ 114.51 | $ 120.34 | $ 174.31 | $ 336.06 | $ 365.45 |
| **Average Bill without HUC** | $ 226.27 | $ 191.49 | $ 120.93 | $ 142.45 | $ 128.81 | $ 116.23 | $ 122.61 | $ 115.10 | $ 120.96 | $ 174.57 | $ 330.32 | $ 357.64 |
| **Average Effective Rate with HUC** | $ 0.251 | $ 0.241 | $ 0.189 | $ 0.196 | $ 0.191 | $ 0.191 | $ 0.188 | $ 0.186 | $ 0.187 | $ 0.237 | $ 0.267 | $ 0.271 |
| **Average Effective Rate without HUC** | $ 0.250 | $ 0.240 | $ 0.190 | $ 0.196 | $ 0.191 | $ 0.191 | $ 0.189 | $ 0.187 | $ 0.188 | $ 0.237 | $ 0.263 | $ 0.265 |
| **Change in Effective Rate** | -0.6% | -0.1% | 0.4% | 0.2% | 0.3% | 0.3% | 0.4% | 0.5% | 0.5% | 0.1% | -1.7% | -2.1% |

**Table 10 - HUC (Non-CARE) TURN DR1 Q11d**

| | Sep-17 | Oct-17 | Nov-17 | Dec-17 | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 | Jun-18 | Jul-18 | Aug-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Average kWh** | 1,276 | 1,156 | 955 | 1,061 | 992 | 887 | 949 | 900 | 939 | 1,023 | 1,626 | 1,672 |
| **Average Bill with HUC** | $553.84 | $491.12 | $332.25 | $373.89 | $344.87 | $307.75 | $327.23 | $309.12 | $322.76 | $426.84 | $730.63 | $754.60 |
| **Average Bill without HUC & without Seasons** | $486.64 | $432.74 | $346.10 | $389.49 | $359.46 | $320.74 | $341.20 | $322.22 | $336.46 | $376.99 | $636.53 | $656.25 |
| **Average Effective Rate with HUC** | $ 0.434 | $ 0.425 | $ 0.348 | $ 0.352 | $ 0.348 | $ 0.347 | $ 0.345 | $ 0.343 | $ 0.344 | $ 0.417 | $ 0.449 | $ 0.451 |
| **Average Effective Rate without HUC & without Seasons** | $ 0.381 | $ 0.374 | $ 0.362 | $ 0.367 | $ 0.362 | $ 0.362 | $ 0.360 | $ 0.358 | $ 0.358 | $ 0.369 | $ 0.391 | $ 0.392 |
| **Change in Effective Rate** | -12.1% | -11.9% | 4.2% | 4.2% | 4.2% | 4.2% | 4.3% | 4.2% | 4.2% | -11.7% | -12.9% | -13.0% |

**Table 11 - HUC (CARE) TURN DR1 Q11e**

| | Sep-17 | Oct-17 | Nov-17 | Dec-17 | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 | Jun-18 | Jul-18 | Aug-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Average kWh** | 899 | 791 | 632 | 723 | 673 | 607 | 649 | 620 | 653 | 760 | 1,302 | 1,362 |
| **Average Bill with HUC** | $291.88 | $246.66 | $154.84 | $183.19 | $166.50 | $150.38 | $159.09 | $151.43 | $160.75 | $240.45 | $467.56 | $494.85 |
| **Average Bill without HUC & without Seasons** | $265.75 | $225.41 | $167.62 | $197.91 | $180.12 | $162.70 | $172.23 | $164.02 | $174.15 | $220.10 | $419.52 | $442.66 |
| **Average Effective Rate with HUC** | $ 0.325 | $ 0.312 | $ 0.245 | $ 0.253 | $ 0.247 | $ 0.248 | $ 0.245 | $ 0.244 | $ 0.246 | $ 0.316 | $ 0.359 | $ 0.363 |
| **Average Effective Rate without HUC & without Seasons** | $ 0.296 | $ 0.285 | $ 0.265 | $ 0.274 | $ 0.268 | $ 0.268 | $ 0.265 | $ 0.265 | $ 0.267 | $ 0.290 | $ 0.322 | $ 0.325 |
| **Change in Effective Rate** | -9.0% | -8.6% | 8.3% | 8.0% | 8.2% | 8.2% | 8.3% | 8.3% | 8.3% | -8.5% | -10.3% | -10.5% |

**Table 10 - HUC (Non-CARE) TURN DR3 Q1a**

| | Sep-17 | Oct-17 | Nov-17 | Dec-17 | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 | Jun-18 | Jul-18 | Aug-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average kWh | 1,276 | 1,156 | 955 | 1,061 | 992 | 887 | 949 | 900 | 939 | 1,023 | 1,626 | 1,672 |
| Average Bill with HUC | $553.84 | $491.12 | $332.25 | $373.89 | $344.86 | $307.75 | $327.22 | $309.11 | $322.76 | $426.84 | $730.64 | $754.60 |
| Average Bill with HUC & without Seasons | $506.06 | $448.76 | $357.69 | $402.52 | $371.27 | $331.33 | $352.28 | $332.79 | $347.47 | $390.02 | $667.60 | $689.50 |
| Average Effective Rate with HUC | $ 0.434 | $ 0.425 | $ 0.348 | $ 0.352 | $ 0.348 | $ 0.347 | $ 0.345 | $ 0.343 | $ 0.344 | $ 0.417 | $ 0.449 | $ 0.451 |
| Average Effective Rate with HUC & without Seasons | $ 0.397 | $ 0.388 | $ 0.375 | $ 0.379 | $ 0.374 | $ 0.374 | $ 0.371 | $ 0.370 | $ 0.370 | $ 0.381 | $ 0.411 | $ 0.412 |
| Change in Effective Rate | -8.6% | -8.6% | 7.7% | 7.7% | 7.7% | 7.7% | 7.7% | 7.7% | 7.7% | -8.6% | -8.6% | -8.6% |

**Table 11 - HUC (CARE) TURN DR3 Q1a**

| | Sep-17 | Oct-17 | Nov-17 | Dec-17 | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 | Jun-18 | Jul-18 | Aug-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average kWh | 899 | 791 | 632 | 723 | 673 | 607 | 649 | 620 | 653 | 760 | 1,302 | 1,362 |
| Average Bill with HUC | $291.88 | $246.66 | $154.84 | $183.19 | $166.50 | $150.38 | $159.09 | $151.43 | $160.75 | $240.45 | $467.56 | $494.85 |
| Average Bill with HUC & without Seasons | $266.46 | $225.18 | $166.85 | $197.39 | $179.41 | $162.04 | $171.43 | $163.16 | $173.20 | $219.52 | $426.92 | $451.84 |
| Average Effective Rate with HUC | $ 0.325 | $ 0.312 | $ 0.245 | $ 0.253 | $ 0.247 | $ 0.248 | $ 0.245 | $ 0.244 | $ 0.246 | $ 0.316 | $ 0.359 | $ 0.363 |
| Average Effective Rate with HUC & without Seasons | $ 0.296 | $ 0.285 | $ 0.264 | $ 0.273 | $ 0.267 | $ 0.267 | $ 0.264 | $ 0.263 | $ 0.265 | $ 0.289 | $ 0.328 | $ 0.332 |
| Change in Effective Rate | -8.7% | -8.7% | 7.8% | 7.8% | 7.8% | 7.8% | 7.8% | 7.7% | 7.7% | -8.7% | -8.7% | -8.7% |

November 30, 2018 PFM as filed

**Table 10: Average Monthly Usage and Bills of Non-CARE HUC Customers**

| | Sep-17 | Oct-17 | Nov-17 | Dec-17 | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 | Jun-18 | Jul-18 | Aug-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average kWh | 1,259 | 1,141 | 941 | 1,045 | 978 | 875 | 936 | 888 | 926 | 1,012 | 1,611 | 1,652 |
| Average Bill with HUC | $ 544.92 | $ 482.68 | $ 325.57 | $ 366.56 | $ 338.35 | $ 302.15 | $ 321.12 | $ 303.48 | $ 316.79 | $ 420.69 | $ 721.53 | $ 743.36 |
| Average Bill without HUC | $ 523.94 | $ 465.39 | $ 315.42 | $ 355.14 | $ 328.00 | $ 292.88 | $ 311.42 | $ 294.23 | $ 307.17 | $ 406.65 | $ 687.84 | $ 707.42 |
| Average Effective Rate with HUC | $ 0.433 | $ 0.423 | $ 0.346 | $ 0.351 | $ 0.346 | $ 0.345 | $ 0.343 | $ 0.342 | $ 0.342 | $ 0.416 | $ 0.448 | $ 0.450 |
| Average Effective Rate without HUC | $ 0.416 | $ 0.408 | $ 0.335 | $ 0.340 | $ 0.335 | $ 0.335 | $ 0.333 | $ 0.331 | $ 0.332 | $ 0.402 | $ 0.427 | $ 0.428 |
| Change in Effective Rate | -3.9% | -3.6% | -3.1% | -3.1% | -3.1% | -3.1% | -3.0% | -3.0% | -3.0% | -3.3% | -4.7% | -4.8% |

**Table 11: Average Monthly Usage and Bills of CARE HUC Customers**

| | Sep-17 | Oct-17 | Nov-17 | Dec-17 | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 | Jun-18 | Jul-18 | Aug-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average kWh | 906 | 797 | 637 | 727 | 673 | 607 | 648 | 615 | 644 | 736 | 1,258 | 1,349 |
| Average Bill with HUC | $ 227.65 | $ 191.77 | $ 120.44 | $ 142.22 | $ 128.38 | $ 115.88 | $ 122.14 | $ 114.51 | $ 120.34 | $ 174.31 | $ 336.06 | $ 365.45 |
| Average Bill without HUC | $ 226.27 | $ 191.49 | $ 120.93 | $ 142.45 | $ 128.81 | $ 116.23 | $ 122.61 | $ 115.10 | $ 120.96 | $ 174.57 | $ 330.32 | $ 357.64 |
| Average Effective Rate with HUC | $ 0.251 | $ 0.241 | $ 0.189 | $ 0.196 | $ 0.191 | $ 0.191 | $ 0.188 | $ 0.186 | $ 0.187 | $ 0.237 | $ 0.267 | $ 0.271 |
| Average Effective Rate without HUC | $ 0.250 | $ 0.240 | $ 0.190 | $ 0.196 | $ 0.191 | $ 0.191 | $ 0.189 | $ 0.187 | $ 0.188 | $ 0.237 | $ 0.263 | $ 0.265 |
| Change in Effective Rate | -0.6% | -0.1% | 0.4% | 0.2% | 0.3% | 0.3% | 0.4% | 0.5% | 0.5% | 0.1% | -1.7% | -2.1% |

**From DR on 1/25/2019**

**Table 10 - HUC (Non-CARE) TURN DR3 Q1a**

| | Sep-17 | Oct-17 | Nov-17 | Dec-17 | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 | Jun-18 | Jul-18 | Aug-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average kWh | 1,276 | 1,156 | 955 | 1,061 | 992 | 887 | 949 | 900 | 939 | 1,023 | 1,626 | 1,672 |
| Average Bill with HUC | $553.84 | $491.12 | $332.25 | $373.89 | $344.86 | $307.75 | $327.22 | $309.11 | $322.76 | $426.84 | $730.64 | $754.60 |
| Average Bill with HUC & without Seasons | $506.06 | $448.76 | $357.69 | $402.52 | $371.27 | $331.33 | $352.28 | $332.79 | $347.47 | $390.02 | $667.60 | $689.50 |
| Average Effective Rate with HUC | $ 0.434 | $ 0.425 | $ 0.348 | $ 0.352 | $ 0.348 | $ 0.347 | $ 0.345 | $ 0.343 | $ 0.344 | $ 0.417 | $ 0.449 | $ 0.451 |
| Average Effective Rate with HUC & without Seasons | $ 0.397 | $ 0.388 | $ 0.375 | $ 0.379 | $ 0.374 | $ 0.374 | $ 0.371 | $ 0.370 | $ 0.370 | $ 0.381 | $ 0.411 | $ 0.412 |
| Change in Effective Rate | -8.6% | -8.6% | 7.7% | 7.7% | 7.7% | 7.7% | 7.7% | 7.7% | 7.7% | -8.6% | -8.6% | -8.6% |

**Table 11 - HUC (CARE) TURN DR3 Q1a**

| | Sep-17 | Oct-17 | Nov-17 | Dec-17 | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 | Jun-18 | Jul-18 | Aug-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average kWh | 899 | 791 | 632 | 723 | 673 | 607 | 649 | 620 | 653 | 760 | 1,302 | 1,362 |
| Average Bill with HUC | $291.88 | $246.66 | $154.84 | $183.19 | $166.50 | $150.38 | $159.09 | $151.43 | $160.75 | $240.45 | $467.56 | $494.85 |
| Average Bill with HUC & without Seasons | $266.46 | $225.18 | $166.85 | $197.39 | $179.41 | $162.04 | $171.43 | $163.16 | $173.20 | $219.52 | $426.92 | $451.84 |
| Average Effective Rate with HUC | $ 0.325 | $ 0.312 | $ 0.245 | $ 0.253 | $ 0.247 | $ 0.248 | $ 0.245 | $ 0.244 | $ 0.246 | $ 0.316 | $ 0.359 | $ 0.363 |
| Average Effective Rate with HUC & without Seasons | $ 0.296 | $ 0.285 | $ 0.264 | $ 0.273 | $ 0.267 | $ 0.267 | $ 0.264 | $ 0.263 | $ 0.265 | $ 0.289 | $ 0.328 | $ 0.332 |
| Change in Effective Rate | -8.7% | -8.7% | 7.8% | 7.8% | 7.8% | 7.8% | 7.8% | 7.7% | 7.7% | -8.7% | -8.7% | -8.7% |

**Table 10 - HUC (Non-CARE) TURN DR1 Q11d**

| | Sep-17 | Oct-17 | Nov-17 | Dec-17 | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 | Jun-18 | Jul-18 | Aug-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average kWh | 1,276 | 1,156 | 955 | 1,061 | 992 | 887 | 949 | 900 | 939 | 1,023 | 1,626 | 1,672 |
| Average Bill with HUC | $553.84 | $491.12 | $332.25 | $373.89 | $344.87 | $307.75 | $327.23 | $309.12 | $322.76 | $426.84 | $730.63 | $754.60 |
| Average Bill without HUC & without Seasons | $486.64 | $432.74 | $346.10 | $389.49 | $359.46 | $320.74 | $341.20 | $322.22 | $336.46 | $376.99 | $636.53 | $656.25 |
| Average Effective Rate with HUC | $ 0.434 | $ 0.425 | $ 0.348 | $ 0.352 | $ 0.348 | $ 0.347 | $ 0.345 | $ 0.343 | $ 0.344 | $ 0.417 | $ 0.449 | $ 0.451 |
| Average Effective Rate without HUC & without Seasor | $ 0.381 | $ 0.374 | $ 0.362 | $ 0.367 | $ 0.362 | $ 0.362 | $ 0.360 | $ 0.358 | $ 0.358 | $ 0.369 | $ 0.391 | $ 0.392 |
| Change in Effective Rate | -12.1% | -11.9% | 4.2% | 4.2% | 4.2% | 4.2% | 4.3% | 4.2% | 4.2% | -11.7% | -12.9% | -13.0% |

**Table 11 - HUC (CARE) TURN DR1 Q11e**

| | Sep-17 | Oct-17 | Nov-17 | Dec-17 | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 | Jun-18 | Jul-18 | Aug-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average kWh | 899 | 791 | 632 | 723 | 673 | 607 | 649 | 620 | 653 | 760 | 1,302 | 1,362 |
| Average Bill with HUC | $291.88 | $246.66 | $154.84 | $183.19 | $166.50 | $150.38 | $159.09 | $151.43 | $160.75 | $240.45 | $467.56 | $494.85 |
| Average Bill without HUC & without Seasons | $265.75 | $225.41 | $167.62 | $197.91 | $180.12 | $162.70 | $172.23 | $164.02 | $174.15 | $220.10 | $419.52 | $442.66 |
| Average Effective Rate with HUC | $ 0.325 | $ 0.312 | $ 0.245 | $ 0.253 | $ 0.247 | $ 0.248 | $ 0.245 | $ 0.244 | $ 0.246 | $ 0.316 | $ 0.359 | $ 0.363 |
| Average Effective Rate without HUC & without Seasor | $ 0.296 | $ 0.285 | $ 0.265 | $ 0.274 | $ 0.268 | $ 0.268 | $ 0.265 | $ 0.265 | $ 0.267 | $ 0.290 | $ 0.322 | $ 0.325 |
| Change in Effective Rate | -9.0% | -8.6% | 8.3% | 8.0% | 8.2% | 8.2% | 8.3% | 8.3% | 8.3% | -8.5% | -10.3% | -10.5% |

FOR BRIEF

**Average Monthly Rates for Non-CARE HUC Customers**

| | Sep-17 | Oct-17 | Nov-17 | Dec-17 | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 | Jun-18 | Jul-18 | Aug-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W/o HUC | -3.9% | -3.6% | -3.1% | -3.1% | -3.1% | -3.1% | -3.0% | -3.0% | -3.0% | -3.3% | -4.7% | -4.8% |
| W/o Seasonal | -8.6% | -8.6% | 7.7% | 7.7% | 7.7% | 7.7% | 7.7% | 7.7% | 7.7% | -8.6% | -8.6% | -8.6% |
| W/o HUC and w/o Seasonal | -12.1% | -11.9% | 4.2% | 4.2% | 4.2% | 4.2% | 4.3% | 4.2% | 4.2% | -11.7% | -12.9% | -13.0% |

**Average Monthly Rates for CARE HUC Customers**

| | Sep-17 | Oct-17 | Nov-17 | Dec-17 | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 | Jun-18 | Jul-18 | Aug-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W/o HUC | -0.61% | -0.15% | 0.41% | 0.16% | 0.33% | 0.30% | 0.38% | 0.52% | 0.52% | 0.15% | -1.71% | -2.14% |
| W/o Seasonal | -8.71% | -8.71% | 7.76% | 7.75% | 7.75% | 7.75% | 7.76% | 7.75% | 7.74% | -8.70% | -8.69% | -8.69% |
| W/o HUC and w/o Seasonal | -8.95% | -8.62% | 8.25% | 8.04% | 8.18% | 8.19% | 8.26% | 8.31% | 8.34% | -8.46% | -10.27% | -10.55% |

**Attachment D:**

SDG&E responses to TURN DR 03-01.

**Typical Monthly Residential Energy Charges at DR w/HUC and DR w/ HUC & w/o Seasons**
**All Climate Zones**
**All, Annual, All**

| Line No. | Energy kWh | Number of Customers | % of Customers | % of Customers Cumulative | Avg kWh for the Range | DR w/ HUC ($) | DR w/ HUC & w/o Seasons ($) | CHANGE ($) | CHANGE(%) | Line No. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | < 25 kWh | 9247 | 1.03% | 1.03% | 7 | $10.29 | $10.28 | ($0.01) | -0.13% | 1 |
| 2 | 25 to 50 kWh | 6721 | 0.75% | 1.77% | 38 | $11.12 | $11.07 | ($0.05) | -0.45% | 2 |
| 3 | 50 to 75 kWh | 9999 | 1.11% | 2.88% | 64 | $15.29 | $15.23 | ($0.06) | -0.41% | 3 |
| 4 | 75 to 100 kWh | 16390 | 1.82% | 4.70% | 89 | $20.20 | $20.10 | ($0.10) | -0.52% | 4 |
| 5 | 100 to 125 kWh | 24519 | 2.72% | 7.43% | 113 | $25.31 | $25.18 | ($0.13) | -0.55% | 5 |
| 6 | 125 to 150 kWh | 31561 | 3.51% | 10.93% | 138 | $30.45 | $30.27 | ($0.18) | -0.59% | 6 |
| 7 | 150 to 200 kWh | 80963 | 8.99% | 19.92% | 176 | $38.80 | $38.56 | ($0.24) | -0.63% | 7 |
| 8 | 200 to 250 kWh | 92563 | 10.28% | 30.20% | 225 | $50.26 | $49.88 | ($0.38) | -0.76% | 8 |
| 9 | 250 to 300 kWh | 95064 | 10.56% | 40.76% | 275 | $62.51 | $61.94 | ($0.57) | -0.92% | 9 |
| 10 | 300 to 350 kWh | 90489 | 10.05% | 50.81% | 325 | $76.20 | $75.35 | ($0.85) | -1.11% | 10 |
| 11 | 350 to 400 kWh | 80460 | 8.94% | 59.74% | 374 | $91.26 | $90.11 | ($1.15) | -1.26% | 11 |
| 12 | 400 to 450 kWh | 69027 | 7.67% | 67.41% | 424 | $108.07 | $106.60 | ($1.47) | -1.37% | 12 |
| 13 | 450 to 500 kWh | 57883 | 6.43% | 73.84% | 474 | $126.35 | $124.53 | ($1.82) | -1.44% | 13 |
| 14 | 500 to 550 kWh | 46994 | 5.22% | 79.06% | 524 | $145.66 | $143.51 | ($2.15) | -1.48% | 14 |
| 15 | 550 to 600 kWh | 37913 | 4.21% | 83.27% | 574 | $166.02 | $163.59 | ($2.43) | -1.47% | 15 |
| 16 | 600 to 650 kWh | 30245 | 3.36% | 86.63% | 624 | $186.52 | $183.81 | ($2.71) | -1.45% | 16 |
| 17 | 650 to 700 kWh | 23744 | 2.64% | 89.26% | 674 | $208.50 | $205.48 | ($3.02) | -1.45% | 17 |
| 18 | 700 to 800 kWh | 33171 | 3.68% | 92.95% | 746 | $239.38 | $236.16 | ($3.22) | -1.35% | 18 |
| 19 | 800 to 900 kWh | 20611 | 2.29% | 95.24% | 846 | $284.26 | $280.51 | ($3.75) | -1.32% | 19 |
| 20 | 900 to 1000 kWh | 12764 | 1.42% | 96.65% | 946 | $330.14 | $325.91 | ($4.23) | -1.28% | 20 |
| 21 | 1000 to 1500 kWh | 20998 | 2.33% | 98.99% | 1173 | $435.92 | $430.42 | ($5.50) | -1.26% | 21 |
| 22 | 1500 to 2000 kWh | 4196 | 0.47% | 99.45% | 1704 | $699.63 | $691.83 | ($7.80) | -1.12% | 22 |
| 23 | 2000 to 3000 kWh | 2339 | 0.26% | 99.71% | 2393 | $1,049.85 | $1,040.28 | ($9.57) | -0.91% | 23 |
| 24 | > 3000 kWh | 2594 | 0.29% | 100.00% | 6062 | $2,902.92 | $2,886.33 | ($16.59) | -0.57% | 24 |
| 25 | TOTAL | 900455 | 100.00% | 100.00% | 417 | $120.83 | $119.39 | ($1.44) | -1.19% | 25 |

**Typical Monthly Residential Energy Charges at DR w/HUC and DR w/ HUC & w/o Seasons**
**All Climate Zones**
**CARE, Annual**

| Line No. | Energy kWh | Number of Customers | % of Customers | % of Customers Cumulative | Avg kWh for the Range | DR w/ HUC ($) | DR w/ HUC & w/o Seasons ($) | CHANGE ($) | CHANGE (%) | Line No. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | < 25 kWh | 164 | 0.07% | 0.07% | -12 | $9.10 | $8.97 | ($0.13) | -1.51% | 1 |
| 2 | 25 to 50 kWh | 420 | 0.18% | 0.25% | 40 | $7.41 | $7.30 | ($0.11) | -1.52% | 2 |
| 3 | 50 to 75 kWh | 1778 | 0.75% | 0.99% | 65 | $10.69 | $10.60 | ($0.09) | -0.86% | 3 |
| 4 | 75 to 100 kWh | 4361 | 1.84% | 2.83% | 89 | $14.28 | $14.18 | ($0.10) | -0.71% | 4 |
| 5 | 100 to 125 kWh | 7367 | 3.10% | 5.93% | 113 | $18.08 | $17.97 | ($0.11) | -0.64% | 5 |
| 6 | 125 to 150 kWh | 10376 | 4.37% | 10.30% | 138 | $22.03 | $21.89 | ($0.14) | -0.64% | 6 |
| 7 | 150 to 200 kWh | 27027 | 11.37% | 21.67% | 176 | $28.11 | $27.91 | ($0.20) | -0.70% | 7 |
| 8 | 200 to 250 kWh | 30174 | 12.70% | 34.36% | 225 | $36.27 | $35.98 | ($0.29) | -0.80% | 8 |
| 9 | 250 to 300 kWh | 30002 | 12.62% | 46.99% | 275 | $44.87 | $44.44 | ($0.43) | -0.96% | 9 |
| 10 | 300 to 350 kWh | 26823 | 11.29% | 58.27% | 325 | $54.40 | $53.77 | ($0.63) | -1.15% | 10 |
| 11 | 350 to 400 kWh | 22565 | 9.49% | 67.77% | 374 | $64.94 | $64.08 | ($0.86) | -1.32% | 11 |
| 12 | 400 to 450 kWh | 18234 | 7.67% | 75.44% | 424 | $76.44 | $75.37 | ($1.07) | -1.40% | 12 |
| 13 | 450 to 500 kWh | 14598 | 6.14% | 81.58% | 474 | $89.46 | $88.12 | ($1.34) | -1.50% | 13 |
| 14 | 500 to 550 kWh | 11281 | 4.75% | 86.33% | 524 | $103.27 | $101.72 | ($1.55) | -1.51% | 14 |
| 15 | 550 to 600 kWh | 8487 | 3.57% | 89.90% | 574 | $118.13 | $116.38 | ($1.75) | -1.48% | 15 |
| 16 | 600 to 650 kWh | 6481 | 2.73% | 92.62% | 624 | $134.41 | $132.49 | ($1.92) | -1.42% | 16 |
| 17 | 650 to 700 kWh | 4728 | 1.99% | 94.61% | 674 | $153.28 | $151.04 | ($2.24) | -1.46% | 17 |
| 18 | 700 to 800 kWh | 6138 | 2.58% | 97.20% | 745 | $179.23 | $176.80 | ($2.43) | -1.36% | 18 |
| 19 | 800 to 900 kWh | 3147 | 1.32% | 98.52% | 844 | $215.28 | $212.64 | ($2.64) | -1.23% | 19 |
| 20 | 900 to 1000 kWh | 1595 | 0.67% | 99.19% | 944 | $254.58 | $251.63 | ($2.95) | -1.16% | 20 |
| 21 | 1000 to 1500 kWh | 1735 | 0.73% | 99.92% | 1146 | $325.45 | $321.56 | ($3.89) | -1.19% | 21 |
| 22 | 1500 to 2000 kWh | 136 | 0.06% | 99.98% | 1674 | $524.71 | $518.16 | ($6.55) | -1.25% | 22 |
| 23 | 2000 to 3000 kWh | 37 | 0.02% | 99.99% | 2254 | $728.27 | $718.92 | ($9.35) | -1.28% | 23 |
| 24 | > 3000 kWh | 17 | 0.01% | 100.00% | 4836 | $1,659.30 | $1,656.80 | ($2.50) | -0.15% | 24 |
| 25 | TOTAL | 237671 | 100.00% | 100.00% | 351 | $66.94 | $66.12 | ($0.82) | -1.23% | 25 |

**Typical Monthly Residential Energy Charges at DR w/HUC and DR w/ HUC & w/o Seasons**
**All Climate Zones**
**Non-CARE, Annual**

| Line No. | Energy kWh | Number of Customers | % of Customers | % of Customers Cumulative | Avg kWh for the Range | DR w/ HUC ($) | DR w/ HUC & w/o Seasons ($) | CHANGE ($) | CHANGE (%) | Line No. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | < 25 kWh | 9081 | 1.38% | 1.38% | 8 | $10.31 | $10.30 | ($0.01) | -0.11% | 1 |
| 2 | 25 to 50 kWh | 6300 | 0.96% | 2.34% | 38 | $11.36 | $11.32 | ($0.04) | -0.40% | 2 |
| 3 | 50 to 75 kWh | 8209 | 1.25% | 3.59% | 63 | $16.29 | $16.23 | ($0.06) | -0.35% | 3 |
| 4 | 75 to 100 kWh | 12008 | 1.83% | 5.42% | 88 | $22.35 | $22.25 | ($0.10) | -0.48% | 4 |
| 5 | 100 to 125 kWh | 17085 | 2.60% | 8.02% | 113 | $28.43 | $28.28 | ($0.15) | -0.52% | 5 |
| 6 | 125 to 150 kWh | 21081 | 3.21% | 11.23% | 138 | $34.58 | $34.39 | ($0.19) | -0.57% | 6 |
| 7 | 150 to 200 kWh | 53580 | 8.15% | 19.38% | 176 | $44.19 | $43.92 | ($0.27) | -0.61% | 7 |
| 8 | 200 to 250 kWh | 61865 | 9.42% | 28.79% | 225 | $57.08 | $56.65 | ($0.43) | -0.75% | 8 |
| 9 | 250 to 300 kWh | 64480 | 9.81% | 38.61% | 275 | $70.72 | $70.08 | ($0.64) | -0.91% | 9 |
| 10 | 300 to 350 kWh | 63030 | 9.59% | 48.20% | 325 | $85.48 | $84.54 | ($0.94) | -1.10% | 10 |
| 11 | 350 to 400 kWh | 57282 | 8.72% | 56.92% | 375 | $101.64 | $100.37 | ($1.27) | -1.25% | 11 |
| 12 | 400 to 450 kWh | 50238 | 7.65% | 64.56% | 424 | $119.58 | $117.96 | ($1.62) | -1.36% | 12 |
| 13 | 450 to 500 kWh | 42852 | 6.52% | 71.08% | 474 | $138.95 | $136.97 | ($1.98) | -1.43% | 13 |
| 14 | 500 to 550 kWh | 35326 | 5.38% | 76.46% | 524 | $159.24 | $156.91 | ($2.33) | -1.47% | 14 |
| 15 | 550 to 600 kWh | 29114 | 4.43% | 80.89% | 574 | $180.05 | $177.43 | ($2.62) | -1.46% | 15 |
| 16 | 600 to 650 kWh | 23520 | 3.58% | 84.47% | 624 | $200.99 | $198.07 | ($2.92) | -1.46% | 16 |
| 17 | 650 to 700 kWh | 18835 | 2.87% | 87.33% | 674 | $222.51 | $219.28 | ($3.23) | -1.45% | 17 |
| 18 | 700 to 800 kWh | 26772 | 4.07% | 91.41% | 746 | $253.35 | $249.94 | ($3.41) | -1.35% | 18 |
| 19 | 800 to 900 kWh | 17306 | 2.63% | 94.04% | 847 | $297.02 | $293.06 | ($3.96) | -1.33% | 19 |
| 20 | 900 to 1000 kWh | 11088 | 1.69% | 95.73% | 946 | $341.23 | $336.83 | ($4.40) | -1.29% | 20 |
| 21 | 1000 to 1500 kWh | 19141 | 2.91% | 98.64% | 1175 | $446.29 | $440.62 | ($5.67) | -1.27% | 21 |
| 22 | 1500 to 2000 kWh | 4051 | 0.62% | 99.26% | 1705 | $705.69 | $697.84 | ($7.85) | -1.11% | 22 |
| 23 | 2000 to 3000 kWh | 2297 | 0.35% | 99.61% | 2395 | $1,055.46 | $1,045.88 | ($9.58) | -0.91% | 23 |
| 24 | > 3000 kWh | 2576 | 0.39% | 100.00% | 6071 | $2,911.71 | $2,895.02 | ($16.69) | -0.57% | 24 |
| 25 | TOTAL | 657117 | 100.00% | 100.00% | 441 | $140.36 | $138.69 | ($1.67) | -1.18% | 25 |